

# 6S4A

## Medium-Mu Triode

### 9-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

#### GENERAL DATA

##### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . .	6.3	volts
Current . . . . .	0.6 $\pm$ 6%	amp
Warm-up time (Average) . . . . .	11	sec

Direct Interelectrode Capacitances (Approx.):<sup>a</sup>

Grid to plate . . . . .	2.4	$\mu$ f
Grid to cathode and heater . . . . .	4.2	$\mu$ f
Plate to cathode and heater . . . . .	0.6	$\mu$ f

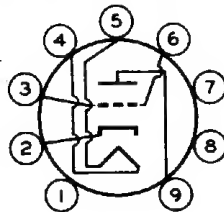
##### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Voltage . . . . .	250	volts
Grid Voltage . . . . .	-8	volts
Amplification Factor . . . . .	16.5	
Plate Resistance (Approx.) . . . . .	3700	ohms
Transconductance . . . . .	4500	$\mu$ mhos
Plate Current . . . . .	24	ma
Plate Current for grid volts = -15. . . . .	4	ma
Grid Voltage (Approx.) for plate $\mu$ a = 50. . . . .	-22	volts

##### Mechanical:

Operating Position . . . . .	Any
Maximum Overall Length . . . . .	2-5/8"
Maximum Seated Length . . . . .	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip) . . . . .	2" $\pm$ 3/32"
Diameter . . . . .	0.750" to 0.875"
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb . . . . .	T6-1/2
Base . . . . .	Small-Button Noval 9-Pin (JEDEC No. E9-1)
Basing Designation for BOTTOM VIEW . . . . .	9AC

Pin 1 - Internal  
Connection—  
Do Not Use  
Pin 2 - Cathode  
Pin 3 - Grid  
Pin 4 - Heater



Pin 5 - Heater  
Pin 6 - Grid  
Pin 7 - Same as  
Pin 1  
Pin 8 - Same as  
Pin 1  
Pin 9 - Plate

#### VERTICAL-DEFLECTION AMPLIFIER

##### Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>b</sup>

DC PLATE VOLTAGE . . . . .	550 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE <sup>c</sup> . . . . .	2200 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE . . . . .	250 max.	volts

← Indicates a change.



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## CATHODE CURRENT:

Peak. . . . .	105	max.	ma
Average . . . . .	30	max.	ma
PLATE DISSIPATION . . . . .	8.5	max.	watts

## PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode.	200	max.	volts
Heater positive with respect to cathode.	200 <sup>d</sup>	max.	volts

## Maximum Circuit Values:

### Grid-Circuit Resistance:

For cathode-bias operation. . . . .	2.2	max.	megohms
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<sup>a</sup> Without external shield.

<sup>b</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

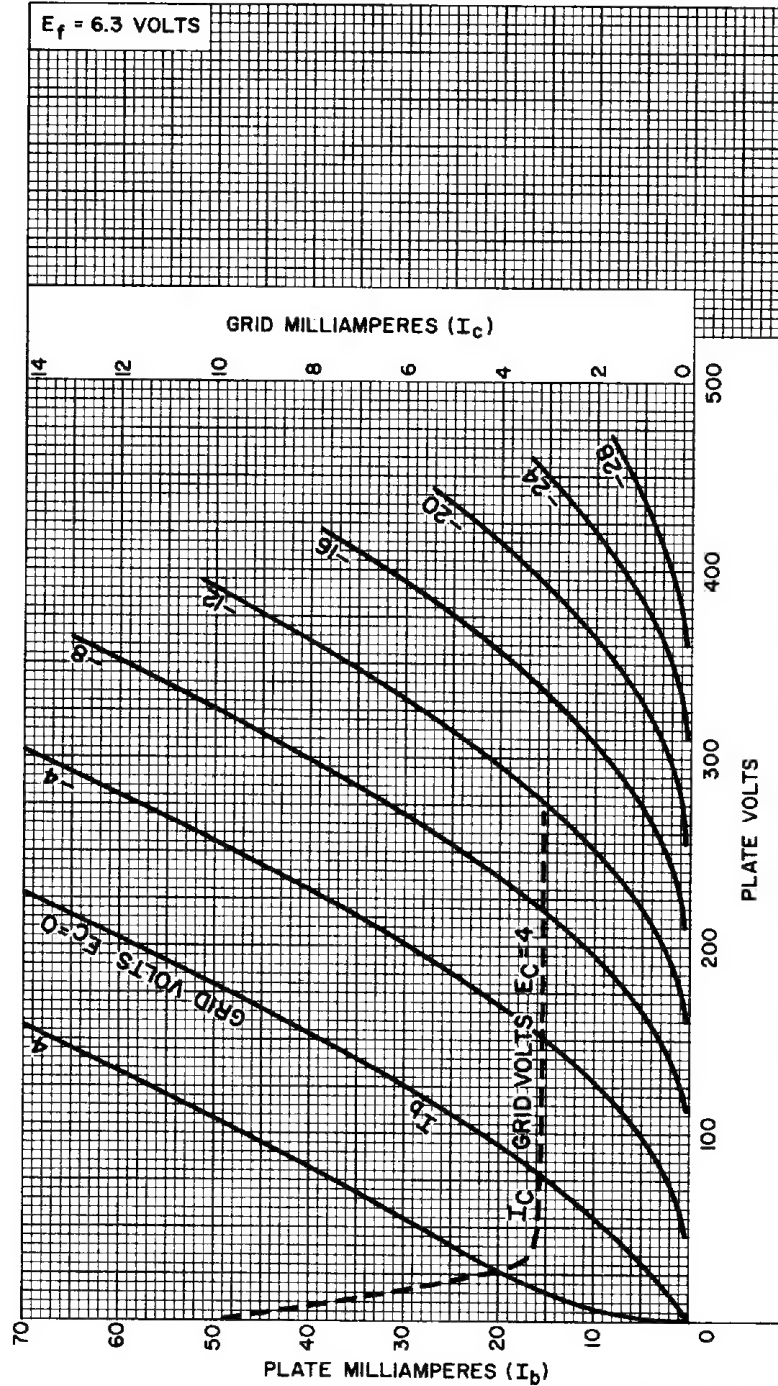
<sup>c</sup> This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

<sup>d</sup> The dc component must not exceed 100 volts.



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## AVERAGE CHARACTERISTICS



92CM-7373RI



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